

IN THE CLAIMS

Please amend the claims to be in the form as follows:

Claim 1 (previously presented): A transmitting device for transmitting a digital information signal via a transmission medium, including:

- input means for receiving the digital information signal,
- adaptive prediction filter means adapted to derive a prediction signal from the digital information signal in dependence on an array of prediction filter coefficients,
- first signal combination means for combining the digital information signal and said prediction signal so as to obtain a residual signal,
- encoding means for encoding said residual signal so as to obtain an encoded signal,
- coefficient generator means for generating an array of filter coefficients $A[i]$ in response to the digital information signal, i being an integer for which it holds that $0 \leq i < p$, where p is a variable,
- output means for supplying the encoded signal to an output terminal for transmission via the transmission medium, and
- smoothing means for smoothing the array of filter coefficients $A[i]$ so as to obtain the array of prediction filter coefficients for supply to the adaptive prediction filter means.

Claim 2 (previously presented): The transmitting device of claim 1, characterized in that the smoothing means includes low-pass filtering means for low-pass filtering the array of filter coefficients so as to obtain the prediction filter coefficients.

Claim 3 (previously presented): The transmitting device of claim 2, characterized in that the low-pass filtering means comprise an FIR filter.

Claim 4 (previously presented): The transmitting device of claim 2, characterized in that the low-pass filtering means comprise an IIR filter.

Claim 5 (previously presented): The transmitting device of claim 2, characterized in that the low pass filtering means is adapted to perform the following equations to obtain the coefficients:

$$C_{out}[0] = C_{in}[0],$$

$$C_{out}[i] = 0.25 \cdot C_{in}[i+1] + 0.5 \cdot C_{in}[i] + 0.25 \cdot C_{out}[i-1], \text{ whereby } i \text{ is an integer and } 1 \leq i \leq n-2,$$

$$C_{out}[n-1] = C_{in}[n-1],$$

$C_{in}[x]$ being coefficient number x before smoothing, and $C_{out}[x]$ being coefficient number x after smoothing.

Claim 6 (previously presented): The transmitting device of any one of the preceding claims, comprises an arrangement for writing the encoded signal on a record carrier.

Claim 7 (previously presented): A method of transmitting a digital information signal via a transmission medium, comprising:

- receiving the digital information signal,
- deriving a prediction signal from the digital information signal in dependence on an array of prediction filter coefficients,
- combining the digital information signal and said prediction signal so as to obtain a residual signal,
- encoding said residual signal so as to obtain an encoded signal,
- generating an array of filter coefficients $A[i]$ in response to the digital information signal, i being an integer for which it holds that $0 \leq i < p$, where p is a variable,
- supplying the encoded signal to an output terminal for transmission via the transmission medium, and
- smoothing the array of filter coefficients $A[i]$ so as to obtain the array of prediction filter coefficients.

Claim 8 (canceled)

Claim 9 (previously presented): The method of claim 7 wherein:

the smoothing includes low-pass filtering the array of filter coefficients $A[i]$ so as to obtain the prediction filter coefficients;

the low-pass filtering is selected between one or more of: FIR filtering and IIR filtering;

the low pass filtering applies the following equations to obtain the prediction filter coefficients: $C_{out}[0] = C_{in}[0]$; $C_{out}[i] = 0.25 \cdot C_{in}[i+1] + 0.5 \cdot C_{in}[i] + 0.25 \cdot C_{out}[i-1]$, whereby i is an integer and $1 \leq i \leq n-2$; $C_{out}[n-1] = C_{in}[n-1]$, $C_{in}[x]$ being coefficient number x before smoothing., and $C_{out}[x]$ being coefficient number x after smoothing;

supplying the encoded signal includes writing the encoded signal on a record carrier.

Claim 10 (cancelled):

Claim 11 (canceled)

Claim 12 (canceled)

Claim 13 (new): A method of transmitting information via a transmission medium, comprising:

receiving a digital information signal;

generating a plurality of filter coefficients in response to the digital information signal,

smoothing the filter coefficients to obtain a plurality of prediction filter coefficients

deriving a prediction signal from the digital information signal in dependence on the filter coefficients,

combining the digital information signal and the prediction signal to obtain a residual signal,

encoding said residual signal to obtain an encoded signal,

supplying the encoded signal to the transmission medium.

Claim 14 (new): The method of claim 13, wherein smoothing further comprises low-pass filtering of the filter coefficients to obtain the prediction filter coefficients.

Claim 15 (new): The method claim 14, wherein the low-pass filtering comprises an FIR filter.

Claim 16 (new): The method claim 14, wherein the low-pass filtering comprises an IIR filter.

Claim 17 (new): The method of claim 14, wherein the low pass filtering is adapted to perform the following equations to obtain the coefficients:

$$C_{out}[0] = C_{in}[0],$$

$$C_{out}[i] = 0.25 * C_{in}[i+1] + 0.5 * C_{in}[i] + 0.25 * C_{out}[i-1], \text{ whereby } i \text{ is an integer and } 1 \leq i \leq n-2,$$

$$C_{out}[n-1] = C_{in}[n-1],$$

$C_{in}[x]$ being coefficient number x before smoothing, and $C_{out}[x]$ being coefficient number x after smoothing.

Claim 18 (new): The method of claim 14, wherein generating comprises generating an array of filter coefficients and smoothing comprise smoothing the filter coefficients to obtain an array of prediction filter coefficients